APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,706	10/30/2001	Mark D. Seaman	10008306-1	2769

7590   05/17/2006

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER
ROSARIO, DENNIS

ART UNIT	PAPER NUMBER
2624	

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 April 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4-18 and 21-33* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4-18 and 21-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All b)☐ Some * c)☐ None of:

　　1.☐ Certified copies of the priority documents have been received.

　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

Response to Amendment

1.   The amendment was received on April 14, 2006. Claims 4-18 and 21-33 are

pending.

Response to Arguments

2.   Applicant's arguments on pages 9,10 with respect to claims 4 and 16 filed

4/14/2006 have been fully considered but they are not persuasive and states:

"...Wang teaches 'pixel data' and 'content data' that are 'associated' with each

other in an image database... *but not combined together in a single file.*"

This statement is not claimed in claim 4. However see the abstract.

3.   Applicant's arguments on page 10 with respect to claims 4,7,13 filed 4/14/2006

have been fully considered but they are not persuasive and states:

"In particular, not described by Fuller is identifying 'content within the image'."

However, the examiner respectfully disagrees since Fuller et al. (US Patent

6,877,134 B1) discloses identifying content (or "visual analysis" in col. 4, line 15) within

the image ("video signal" in col. 4, line 15).

4.   Applicant's arguments on page 11 with respect to claims 5,12,14,18 filed

4/14/2006 have been fully considered but they are not persuasive and states:

        "...Fuller is...not creating a 'searchable keyword' as is required by claim 5."

        However, the examiner respectfully disagrees since Fuller does disclose a

searchable (or "search" in col. 3, line 61) keyword (or "keyword" in col. 4, line 1).

5.   Applicant's arguments on page 11 with respect to claim 7 filed 4/14/2006 have

been fully considered but they are not persuasive and states:

        "...Fuller first does not teach an 'image capture device'..."

        The "image capture device" is not given any patentable weight since the "image

capture device" is part of the preamble.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7.   Claims 4,19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by

Wang et al. (US Patent 6,035,055 A).

Regarding claim 4, Wang et al. discloses an image file embodied in a computer-

readable medium, comprising:

a)   digital image data (fig. 3,num. 130,131,132,103) that represents an image;

and

b)   image meta-data (fig. 2, num. 71a) associated with the digital image data

created by applying a predefined image analysis algorithm (fig. 3,num. 102) to the

digital image data to identify content ("content information" in col. 6, line 46.) within the

image.

Regarding claim 19, Wang et al. discloses a method for locating an image file,

the method comprising:

a)   providing a search query (Fig. 6, num. 403) comprising information related

to specific image meta-data; and

b)   receiving one or more image files (fig. 6,num. 405) comprising image

meta-data that matches (via fig. 3,num. 131) the image meta-data specified in the

search query, the image meta-data having been generated by applying a predefined

image analysis algorithm (Fig. 3,num. 102) to the digital representation of the image to

identify content within the image.

Regarding claim 20, Wang et al. discloses the method of claim 20, wherein the

image meta-data and the search query comprises at least one searchable keyword

("text description" in col. 7, line 52).

8.   Claims 4,5,7-15 and 21-33 are rejected under 35 U.S.C. 102(e) as being

anticipated by Fuller et al. (US Patent 6,877,134 B1).

Regarding claim 4, Fuller et al. discloses an image file embodied in a computer-

readable medium, comprising:

a)   digital image data (fig. 19, num. 1205) that represents an image; and

b)   image meta-data ("Metadata" that is inputted into fig. 19,num. 1700)

associated with the digital image data created by applying a predefined image analysis

algorithm (fig. 19,num. 1300) to the digital image data to identify content within the

image.

Regarding claim 5, Fuller et al. discloses the image file of claim 4, wherein

the image meta-data comprises at least one searchable keyword ("keyword" in col. 4,

line 1).

Regarding claim 7, Fuller et al. discloses an image capture device, comprising:

a)　　image capture hardware configured to capture an image ("camera" in col., line 6., line 46.); and

b)　　logic configured for:

b1)　　generating a digital representation of the image (fig. 19,num. 1203 outputs or generates the image.), the digital representation comprising image data;

b2)　　applying at least one predefined image analysis algorithm (Fig. 19,num. 1300) to the digital representation of the image to identify content (Fig. 1,num. 300 analyzes content; thus the content is identified.) within the image,

b21)　　the at least one predefined image analysis algorithm generating image meta-data (The output of fig. 19,num. 1300) corresponding to the image content; and

b3)　　combining (Fig. 19,num. 1700) the image meta-data corresponding to the image content with the image data (via num. 1207) to define new image data (Fig. 19,num. 1700 is a new image data or "Combined" in fig. 19,num. 1700 image data.).

Regarding claim 8, Fuller et al. discloses the image capture device of claim 7, wherein the logic is software ("software" in the abstract) and further comprising a processing device ("mechanisms" in the abstract.) for implementing the logic.

Regarding claim 9, Fuller et al. discloses the image capture device of claim 7, wherein the logic is further configured for storing the new image data (Fig. 19, num. 1700).

Regarding claim 10, Fuller et al. discloses the image capture device of claim 7,

further comprising:

a)   a network interface device (Fig. 1,num. 150) configured for communication with a

communications network (Fig. 1 all numerals except num. 150) and wherein the logic is

further configured for:

a1)   providing the new image data to the communications network (via

servers of fig. 1,num. 130 and 140).

Claim 11 is rejected the same as claim 10. Thus, argument similar to that

presented above for claim 10 is equally applicable to claim 11.

Claim 12 is rejected the same as claim 5. Thus, argument similar to that

presented above for claim 5 is equally applicable to claim 12.

Claim 13 is rejected the same as claim 7. Thus, argument similar to that

presented above for claim 7 is equally applicable to claim 13 except for the limitation of:

a)   identifying a digital representation of an image ("Keyframes" in col. 7, line 17 are

"extracted" in col. 7, line 17), the digital representation comprising image data.

Claim 14 is rejected the same as claim 5. Thus, argument similar to that

presented above for claim 5 is equally applicable to claim 14.

Regarding claim 15, Fuller et al. discloses the method of claim 13, wherein

identifying a digital representation of the image involves receiving ("during [a] capture

process" in col. 7, line 17) the image data.

Regarding claim 21, Fuller et al. discloses the image file of claim 4, wherein the

identified content comprises a recognized face ("Face identification" in col. 4, line 4).

Claim 22,24,25,28,29,31 and 32 are rejected the same as claim 21. Thus, argument similar to that presented above for claim 21 is equally applicable to claims 22,24,25,28,29,31 and 32.

Regarding claim 23, Fuller et al. discloses the image file of claim 4, wherein the identified content comprises a recognized location (or "Location" in col. 9, line 56).

Claims 26,30 and 33 are rejected the same as claim 23. Thus, argument similar to that presented above for claim 23 is equally applicable to claims 26,30 and 33.

Regarding claim 27, Fuller discloses the image capture device of claim 7, wherein the image capture device is a digital camera.

Note that the claimed "digital camera" is not given patentable weight since the claimed "digital camera" is part of the preamble of claim 7 and does not perform an active function or included in a function with respect to the body of claim 7. The body of claim 7 does not need the claimed "digital camera" in order to perform the method of claim 7 or the body of claim 7 is understood without the claimed "digital camera".

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
such that the subject matter as a whole would have been obvious at the time the invention was made to a
person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived
by the manner in which the invention was made.

10.   Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller et

al. (US Patent 6,877,134 B1) in view of Souma et al. (US Patent 5,901,244 A).

Regarding claim 6, Fuller et al. teaches the image file of claim 4, wherein the predefined

image analysis algorithm comprises:

        a)   a face recognition algorithm ("Face identification/recognition" in col. 4, line

4.).

        However, Fuller et al. does not teach the claimed vectors associated with the

face recognition algorithm, but does teach "Image feature Vectors" in col. 3, line 63.

Thus, Fuller et al. does suggest that image feature vectors may correspond to the face

identification/recognition since a face is a feature of an image. However, Fuller et al.

does not show how a vector is related to the face identification/recognition. Thus, Fuller

et al. suggests that there is a connection between vectors and face recognition.

Souma et al. teaches face identification (see title) in fig. 1,num. 110 and vectors or

"feature vector" in fig. 1,num. 102.

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the image feature vector and face identification/recognition teaching of Fuller et al. with Souma et al.'s teaching of face identification in fig. 1,num. 110 and "feature vectors" in fig. 1,num. 102, since Souma et al. shows how vectors are related to face recognition/identification and "enhances...the identification (Souma et al., col. 4, lines 56-58)."

11.   Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller et al. (US Patent 6,877,134 B1) in view of Li et al. (US Patent 5,734,893 A).

Regarding claim 16, Fuller et al. teaches the claimed image meta-data having been generated by applying a predefined image analysis algorithm to the digital representation of the image to identify content within the image as addressed in claim 4, above.

Fuller et al. does not teach the remaining limitations of claim 16, but does teach that meta-data can be used for a "search" in col. 4, line 20. However, Fuller et al. does not appear to teach a method of searching with meta-data and is focused on a "browse" in col. 4, line 21 operation. Since Fuller et al. does not provide a method of searching, Fuller et al. suggests a method of searching with meta-data.

Li et al. teaches a method of searching with meta-data as shown in fig. 2 and the remaining limitations of claim 16 of:

a)   receiving a search query (Fig. 2,num. 202 receives a search query via fig. 2,num. 201) comprising information related to specific image meta-data;

b)   based on the search query, searching one or more image files (fig. 1,num.

105) for the image meta-data specified in the search query; and

c)   identifying (Fig. 2, num. 204 matches which is a form of identifying.) one or

more of the image files that comprise image meta-data that matches the image meta-

data specified in the search query.

It would have been obvious at the time the invention was made to one of ordinary

skill in the art to modify Fuller et al.'s meta-data with the search method of Li et al.,

because Li et al.'s search method "assist[s] the user...regarding...the...query (Li et al.,

col. 3, lines 15-17)."

Claim 17 is rejected the same as claim 16c). Thus, argument similar to that

presented above for claim 17 is equally applicable to claim 16c.

Regarding claim 18, Li et al. of the combination teaches the method of claim 16,

wherein the image meta-data and the search query comprises at least one searchable

keywords ("keywords" in col. 1, line 30).

Conclusion

12.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

13.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Dennis Rosario whose telephone number is (571) 272-

7397. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

ᴅ𝖱
Dennis Rosario
Unit 2624

DANIEL MIRIAM
PRIMARY EXAMINER